ASL

Australian Society for Limnology Inc.

NEWSLETTER

Volume 45 # 4, December 2007

AUSTRALIAN SOCIETY FOR LIMNOLOGY INC.

The Australian Society for Limnology Inc. (ASL) is an Australian-based scientific society whose focus is the study and management of inland waters. The ASL was established in 1961, and has a current membership of over 650 researchers, managers, engineers, teachers and tertiary level students from all states and territories. Members have a strong professional interest in inland aquatic issues, including the maintenance of biodiversity, the maintenance and/or restoration of water quality, and the wise use of aquatic resources. The Society also has a strong interest in fostering the scientific and intellectual development of tertiary students.

The Society includes members working in government agencies, tertiary institutions and many industries related to aquatic resources. Through their daily activities, members have contact with local communities and are in a sound position to interpret and advise on inland water issues. The Society has a substantial knowledge base, and has assumed a responsibility to ensure that this is available to those who manage inland waters.

Accordingly, the charter of the ASL is to further our understanding of Australia's inland waters and to promote their wise use and sustainable management. In this manner we will contribute to the continued existence of this valued resource and the maintenance and enhancement of the quality of life for all Australians. The ASL regularly produces a newsletter with notes on limnological activities, articles of interest, book reviews and announcements of upcoming events likely to be of interest to Members.

ASL Home Page - http://www.asl.org.au/

EXECUTIVE OFFICERS 2006-2007

President
Professor Stuart E. Bunn
Director, Australian Rivers Institute, Griffith University,

Vice-President
Darren Baldwin
Senior Research Scientist, The Murray-Darling Freshwater Research Centre

Immediate Past President
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PRESIDENT'S REPORT

I have only just returned from my travels to the combined ASL-NZFSS meeting in Queenstown – taking great pains to ensure that my potentially Didymo-infested boots were well cleaned before leaving. The highlight of the conference for me (aside from the fantastic weather, spectacular venue and warm hospitality from our NZ colleagues) was the exceptional standard of presentations and posters. All of our members and especially the students are to be commended for such a great effort. In particular, I congratulate **Sarina Loo** (ASL prize) and **Katrina Lansdown** (SEQWater prize), and **Amber Clarke** and **Catherine Leigh** who received honourable mentions for their presentations of their PhD research. Congratulations also go to **Belinda Young** (Honours prize), **Scott Hardie** (Poster prize) and **Sue Powell** (MFR poster prize). The Conference dinner was, as promised by our kiwi hosts, an 'extreme' event, though curiously seemed to involve a significant level of cross-dressing. For those unable to attend you missed a truly memorably meeting. I take this opportunity to once again thank **Chris Arbuckle** and the rest of the organizing committee for putting on such a great event.

At the AGM, members were informed that **Margaret Hart** was stepping down as Treasurer/Membership Officer of the Society after over 20 years of dedicated service. Margaret has admirably managed the Society's affairs since before I first joined as a member and her absence from the Executive will seem rather weird. On behalf of the Society, I wish Margaret all the best in her post-ASL retirement and hope that she will be able to attend the 2008 ASL meeting for a suitable send-off. I also take this opportunity to thank **Sabine Schreiber** for agreeing to take on the role of Treasurer/Membership Officer and am pleased that the Society is in such good hands for the future. We also welcomed two new members to the ASL Executive – **Fran Sheldon** (Queensland) and **Scott Hardie** (Tasmania) – and I thank **Stephen (Harry) Balcombe** and **Dan Warfe** for their contributions. Finally, it would be remiss of me not to also thank **Richard Marchant** for agreeing to continue in his capacity as Secretary of the Society. Presidents come and go but it is important to appreciate that Societies like ours would cease to function without the long-term dedication and commitment of our Office bearers.

There was plenty of discussion at the AGM and our recent Executive meeting about the declining Society membership and what we can do about it. One significant issue is the loss of some of our long-standing members (I hasten to add this is not because they are recently deceased). I will be contacting them shortly to see whether we can regain their support but also urge you to check with your colleagues to see if they have simply forgotten to renew or need some additional encouragement. It was also noted that quite a few of the people mentioned in "Reports from the trenches' in the Newsletter are not members and we have asked our Regional Executive members to follow up and find out why. Finally, there was general agreement that we should be more proactive in building our student base and that there was more we can and should be doing to support student members. Several great ideas were raised at the AGM and we will be following up on these in the New Year. As part of this initiative, I am hoping we can put together a small student 'Executive group' to assist the student representative on the ASL Executive. If anyone is interested in getting more actively involved, please let me know.

I hope you all have a relaxing break over the holidays and wish you all the best for 2008.

Stuart Bunn December 2007

(Or is that Queenstown?– apparently the jet-setting lifestyle of ARI Director and ASL president Stuart Bunn means that he really doesn't know where he is. Stuart succeeded in his opening address at ASL in Queenstown NZ in clearly stating how pleased he was to be in QueensLAND – and earned himself a well-deserved door prize – ed.)

EDITOR'S NOTE

Do you know the one about the Scotsman, the New Zealander, the Samoan bouncer and the big blue foam rubber hat?? No?? Then clearly you were either not at the joint ASL/NZFSS meeting in Queenstown or you were smart enough to go to bed early after the dinner. I wasn't and despite the event which is indicated cryptically above, I had a great time. The conference was very successful; the standard of the talks (especially student talks) was fantastic, the weather wonderful and the setting simply stunning. Gratifying as a Kiwi that it didn't rain, and that there were no major sporting events happening at the time.

I will be continuing for another year as editor and I would like to thank everyone for their ongoing support. I will incrementally make some changes in the coming year, so if you think I have overstepped the mark, removed your favourite bit or you simply have a bright idea for the newsletter I would appreciate hearing from you. I am always open to comments, criticism, compliments and dirty limericks.

On the political scene we have a new government. Of most relevance to ASL will be Senator Penny Wong, who takes responsibility for climate change and water, including Kyoto, the carbon trading scheme and the integration of mandatory renewable energy targets. Peter Garrett has been appointed to the portfolios of environment and heritage, with a specific role for implementing solar energy programs. It is of note that the Rudd government have signed Kyoto and that the Prime Minster himself is off to Bali to the latest round of climate change negotiations. We shall see what arises. Of equal interest will be how the plans for the Murray proceed – given that during the campaign the Labour party supported the coalition's water plan. I can only hope that now the politicking is out of the way that some sensible, proactive decisions are made at both federal and state level, and that water stops being a political football and is recognized as the immediate crisis that it is.

On a more festive note – I would like to wish all members the very merriest of Christmas seasons. I for one will be on the beach in southern New Zealand (an inherently risky venture), but will no doubt find time to peer under a few rocks in the occasional stream. **The deadline for the next edition will be March 15th.**

MERRY XMAS!!!

Ross Thompson

School of Biological Sciences

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ANNOUNCEMENTS

Australian Rivers Institute

Research Training and Scholarship opportunities 2007/2008

The Australian Rivers Institute (ARI www.rivers.edu.au) was established in 2006 to provide a focus for river, catchment and coastal research and education. Exciting new research opportunities are now available with Tropical Rivers and Coastal Knowledge (TRaCK) Research Hub.

ARI offers the following scholarship opportunities for students considering a Research Higher Degree (Masters and PhD)

- SEQWater PhD top-up stipend ($10,000 pa) on water reservoir research for scholarship holders enrolled at Griffith University in 2008.
- TRaCK PhD scholarships for 1st or 2A Honours graduates (or Masters equivalent) or top-up stipends for APA scholarship holders at Griffith University (up to equivalent of 5 full scholarships @ $25,118 pa). Further details about the TRaCK program can be found at www.track.gov.au. (Contact Prof Stuart Bunn – s.bunn@griffith.edu.au).
- ARC Linkage PhD Scholarship ($25,118 pa) in microbial ecology studying toxic cyanobacteria and viruses in Brisbane's water storages (with SEQ Water). (Contact Dr Peter Pollard – p.pollard@griffith.edu.au).
- ARC Linkage PhD Scholarship ($25,118 pa) studying forestry effects on stream foodwebs and ecosystem health (with Forests NSW) (Contact Dr Fran Sheldon – f.sheldon@griffith.edu.au).
- ARC Linkage PhD Scholarship ($25,118 pa) studying the role of phosphorus in subtropical reservoirs (with SEQ Water). (Contact Dr Michele Burford – m.burford@griffith.edu.au).

Postgraduate students receive significant support for field and laboratory research and funding for conference travel.

For further information, contact Gina Palmer, ARI Manager:
Tel: (07) 3735 7510; Fax: (07) 3735 7615
E-mail: ari@griffith.edu.au

Professor of Freshwater Ecology

Monash University, Melbourne, Australia

Monash University is seeking an outstanding scholar and research leader in freshwater ecology for appointment as a Professor of Freshwater Ecology in the School of Biological Sciences. The appointee will replace Professor P. S. Lake upon his retirement.

The successful candidate will bring dynamic leadership to the future development of the school, faculty and university-wide water research and teaching program. The School of Biological Sciences has a very strong international reputation in freshwater ecology and is committed to being pre-eminent in a field that has national and international significance.

The appointee will have: a research doctorate in a relevant field; an international reputation for research in freshwater ecology; demonstrated success in establishing and leading successful research teams and innovative research programs; a record of successful supervision of postgraduate students; demonstrated skills in management and development of staff; track record of links with water industries (including government); and a clear vision for the future development of freshwater ecology in the School of Biological Sciences.

Remuneration: professorial salary $A128,856 per annum, plus generous superannuation. Relocation travel and removal allowances and salary packaging are available.

Selection documentation may be accessed electronically on the world wide web: http://www.adm.monash.edu.au/human-resources/employment/senior/

Inquiries of an academic nature may be directed to Associate Professor Gordon Sanson, Head, School of Biological Sciences, email: gordon.sanson@sci.monash.edu.au

Applications, which must specifically address all of the selection criteria, should reach Ms Bronwen Meredith, Senior Academic Appointments, Monash University, Victoria 3800, Australia, or by email to bronwen.meredith@adm.monash.edu.au no later than 1 February 2008.

Inquiries regarding the application process may be directed to Ms Meredith, by email or telephone +61 3 9905 6193, facsimile +61 3 9905 6016.

The university reserves the right to appoint by invitation.

Monash respects the privacy of your personal information. For more details visit www.privacy.monash.edu.au

Lecturer in Freshwater Ecology

Monash University, Melbourne, Australia

Applications are invited for a continuing lectureship in Freshwater Ecology in the School of Biological Sciences. Applicants should be able to demonstrate flair and productivity in research, an excellent track record and the potential to attract research grants and graduate students. The successful applicant will be expected to be able to teach in all undergraduate years and broadly complement the research interests of the School.

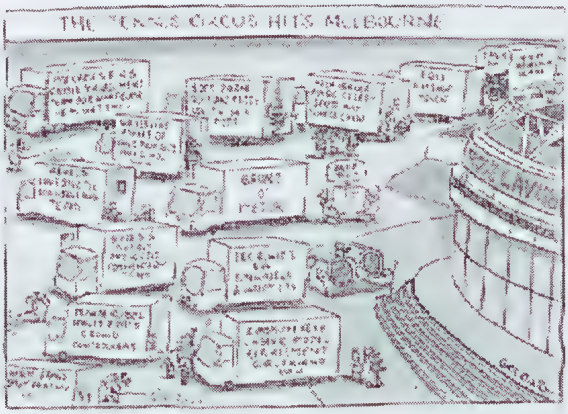
Closing date: 11 January 2008

Salary range: Aus$ 67,818 – 80,535

Location: Clayton campus, Monash University

Contact and Applications: Ms Carol Logan, Telephone 61 (0)3 9905 5650; Fax 61 (0)3 9905 5613; email carol.logan@sci.monash.edu.au.

Applications should include a list of publications, an integrated research plan, curriculum vitae and the names (with email addresses plus phone and fax numbers) of three referees.



The Third Waterbug Workshop

Ed Tsyrlin, John Gooderham and Tom Sloane have the distinct pleasure of announcing THE THIRD EVER WATERBUG WORKSHOP.

The Workshop will be held 26-28th of March (just after Easter) in the Biology Labs at Monash University, Clayton, Victoria.

It is basically a 3 day crash course / refresher in family level Freshwater Invertebrate identification spiced up with a lush palette of multimedia tools including: waterbug movies, macro-photographs, manga style cartoons and some knowledge .....all served up in a hi-tech laboratory where all the microscopes are equipped with digital movie cameras. It's sort of like waterbugtopia.... and you are invited. For more details and to register a place visit:

http://www.thewaterbug.net

or simply contact John (email: flatworm@ozemail.com.au, mob: 0412 831 367)

This year we are also considering (depending on interest) a one-day difficult-waterbug wondercourse. At this, we are hoping for people to bring along specimens they are struggling with, and we will use these problem animals as the basis for the workshop. Its a good chance to empty out the "Unknown" specimen drawer...hopefully we can put some names on things, and in this informal session we will have the luxury of relaxed ID problem solving....one of those tasks that is ace fun in groups but hellish by yourself, in a dungeon somewhere with no human contact.....so this might appeal to consultants... This is also a good opportunity to refresh the memory for the past Waterbug Workshop participants.

AUSRIVAS course now enrolling: Module 1 to start in February

The AUSRIVAS Online training course is offered twice a year by the eWater CRC and the University of Canberra. The course aims to teach the skills and knowledge needed to assess river health to an acceptable standard using the Australian River Assessment System (AUSRIVAS) methods. Those who complete its requirements successfully are eligible for accreditation from the relevant state or territory agency.

There are no prerequisites for this non-award course, other than registration and payment. The theoretical knowledge required to use AUSRIVAS for river health assessment can be learnt entirely online in four interactive modules that can be completed at you own pace over 12 weeks. A 4-day practical face-to-face workshop is offered as a fifth module, teaching the practical skills required. The workshop module is held in Canberra but would you like us to hold a workshop in your state? If there is sufficient demand from a group or agency we can arrange a workshop in any State or Territory.
The first module of the next AUSRIVAS Online course is scheduled in late February 2008 and is enrolling now! If you would like to enroll in the course or any individual module please contact Sue Nichols at sue.nichols@canberra.edu.au for more information or queries regarding a workshop outside the ACT.
http://ausrivas.canberra.edu.au/Bioassessment/Macroinvertebrates/Training/

It is also time to enrol in Watercourses Online!!

Brush up your knowledge about the ecology of Australian river systems and how they are affected by catchment land-use and other human disturbance.

Watercourses Online is a growing set of online training courses, designed primarily to support personnel in water management, natural resources management, environmental education and ecological consulting.

The 3 courses currently offered are:
- Ecology and River Function
- Catchments: their Character, Waters & Chemical Composition
- Waterway Assessment

Find more details by following the links from http://freshwater.canberra.edu.au

Or contact
Professor Richard Norris
phone 02 6201 2543
email richard.norris@canberra.edu.au

Sue Nichols
phone 02 6201 5408;
email sue.nichols@canberra.edu.au

Professor William Maher (for Catchments module only)
phone 02 6201 2531;
email bill.maher@canberra.edu.au

MINUTES ASL ANNUAL GENERAL MEETING Queenstown, NZ, 5th December 2007

(p = proposed, s = seconded)

1. Adoption of agenda: accepted (p= R.Marchant, s = S.Bunn)

2. Apologies: B.Zampatti, J.Harris, D.Baldwin, P.S.Lake, M.Hart

3. Acceptance of minutes from last AGM: accepted. (p = R.Marchant, s= S.Bunn)

4. Matters arising: none

5. **President's report:** S. Bunn highlighted the growing national interest in water resource issues and the significant opportunities this presents for the Society's membership and, especially, for students thinking about potential careers in water science. Several major new research initiatives had recently been funded through the NWC and DEWR, including for example multi-million dollar investments in research on Australia's northern rivers and coasts. There are already concerns that we will not be able to meet demand for skilled water scientists and the Society can play a key role by developing strategies to help build capacity. Despite these trends, the Society's membership has continued to decline, and the Executive has been considering initiatives to re-engage long-standing members who have not renewed their subscriptions and to grow our student membership. S.Bunn intends to contact members who have recently left the Society (or at least failed to renew their subscription) to seek their continued support and active engagement. We will also be seeking support from members who are University staff to encourage their students to join. However, it is also time for us to consider the range of benefits the Society can offer student members. The Society is in good financial shape to consider some strategic investments in this area and this will be an item for discussion later in the AGM. It is also worth noting that the Executive had also recently agreed to create a new category of Emeritus membership for those members of the Society who had maintained active membership for 40 years or more. Finally, S.Bunn noted that, after over 20 years of service, Margaret Hart was standing down as Treasurer and Membership Officer of the Society and thanked her for her unwavering support for the Society over this time. Although Margaret was unable to attend the meeting in New Zealand, we will ensure that she is able to attend the meeting in 2008 so that we have the opportunity to thank her in person. (accepted p = R.Marchant, s = B.Robson).

6. **Secretary's report:** two teleconferences were held since the last AGM (9 March 2007 and 30 Nov 2007) and the minutes of these have been or are about to be published in the newsletter *(see page 14 of this newsletter - ed.)*. The annual statement to Corporate Affairs Victoria will be submitted after this conference and will be a few days past the deadline (Nov 30). (accepted p = L.Barmuta, s = A.McComb)

7. **Treasurer's report:** (this was given by R.Marchant in M.Hart's absence) The society currently has 469 members consisting of 355 ordinary, 91 student and 23 life members; there are in addition 13 institutional members. The financial statements for the last financial year are attached. R.Marchant pointed out to members the decline in subscriptions received in the last year. However, since the statement was compiled in June a further $6000 in subscriptions has been received. (accepted p = R.Marchant, s = M.Grace)

8. **Honorarium for the Treasurer**: R.Marchant proposed that the society should pay M.Hart $2500 for her services over the last year (s = A.Boulton). The president noted that this was Margaret Hart's last year as Treasurer and that a suitable commemoration for her many years of service will be discussed by the ASL executive.

9. **Auditor' report**: this was read out to the members and accepted (p = R.Marchant, s = R.Pearson).

10. **Newsletter Editor's report:** R.Thompson noted that he had made some changes to the format of the newsletter to enable it to be more easily transferred to a pdf file. A.Boulton proposed a vote of thanks (s = R.Marchant) for Ross' work as editor over the last year. This was carried with acclamation.

11. **ASL Medal Award committee report:** R.Marchant as spokesman for the current committee (J.Davis, A.Boulton, R.Marchant) announced that Prof S.Bunn had been awarded the society's medal. His citation was read out: *(and is reported on page 12 of this newsletter – ed.)*

12. **Early Career Excellence Award:** B.Robson on behalf of the committee (F.Sheldon, L.Barmuta, B.Robson) announced that this year's award had been made to Dr Chris Walsh. His citation follows *(on page 13 of this newsletter – ed.)*

13. **Bill Williams' Travel Award report:** R.Marchant announced that Jeremy Groves (University of Canberra) had been granted this award to enable him to present some of his PhD research at an international conference.

14. **Student Travel Award committee report:** R.Marchant noted that 11 students had received $1000 each to attend the Queenstown conference and present their work. These students were: K.Cheshire, J.Groves, E.Harrison, A.Jensen, S.Lee, C.Leigh, R.Rolls, D.Smith, E.Wallis, S.Watkins and A.Watson.

15. **Student prizes**: Sarina Loo – PhD prize (honourable mentions to Amber Clarke and Catherine Leigh); Katrina Landsdown - SEQW prize; Belinda Young – Honours prize; Scott Hardie – Poster prize; Sue Powell – MFR poster prize.

16. **47th Congress**: this will be held at Mandurah WA and is being organised by M.Lund. The venue has been booked and the congress will run from Mon 29 Sept to Fri 3 Oct 2008.

17. **Future Congresses**: a number of possibilities were suggested – Alice Springs (J.Davis), Cairns (R.Pearson) and Darwin.

18. **Election of the Executive**: three positions needed to be filled.
Treasurer/membership officer – S.Schreiber (p = R.Marchant, s= P.Suter)
Queensland – F.Sheldon (p = S.Bunn, s= M.Burford)
Tasmania – S.Hardie (p = L.Barmuta, s = R.Marchant)

19. **Election of the Auditor**: R.Marchant proposed (s = P.Suter) that Coster Galgut be elected for 2007-08.

20. **General Business:**

a) Student prizes: S.Bunn noted that the executive at its last teleconference discussed the apparent proliferation of prizes for students at annual congresses. It was felt that if too many prizes were given it would undervalue all prizes. It was also felt important not to confine prizes to narrow topics and that all student presenters should be eligible for awards. S.Bunn suggested that the society needs to define more closely the categories of prizes to be awarded and that sponsors might be encouraged to support a prize for a given period (say 5 years). There was some discussion of these matters and a general endorsement was given to the ASL executive to review prize categories and mechanisms for raising prizemoney.

b) Incentives for student members: this issue had been discussed at the last executive teleconference and it was suggested that it be brought before the members at the AGM. S.Bunn will contact ASL members at universities encouraging them to get their students to join and asking for ideas that might help. A number of suggestions were made from the floor: give free membership to 3rd and 4th year undergraduates; provide ASL scholarships for honours students (R.Pearson and P.Suter promoted this idea); publish abstracts of student theses in the newsletter; hold student workshops at congresses covering topics such as media training or writing and submission of papers; hold student mixers at congresses involving both students and potential mentors; upgrade the website so that it is more attractive to students; target students going into management or policy positions to retain their membership and encourage others in similar positions to join. S.Bunn noted that the society was in a sound financial position and that the executive would examine these possibilities.

c) Taxonomic workshops: P.Suter indicated that the taxonomic workshops that were organised in the past by J.Hawking (MDFRC) would begin again, probably in Feb 2009.

AGM closed at 2pm.

ASL MEDAL CITATION
Professor Stuart Bunn

Stuart gained his PhD at the Department of Zoology at the University of Western Australia in 1985. He then accepted a post-doctoral position with Noel Hynes at the University of Waterloo, Canada. He returned to Australia to Griffith University in 1988 where he is now Professor and Director of the Centre for Riverine Landscapes. Stuart Bunn is a longstanding and active contributor to the ASL. He has served as an Executive Committee member for more than 10 years including holding the position of President and Vice-President on two occasions.

He has an outstanding record of publication and grant success and has a respected international profile. Since his PhD, Stuart has published over 80 papers in international journals, 15 book chapters and nearly 50 conference proceedings and general publications. Stuart's publications have a large impact on both the Australian freshwater fraternity and internationally. His papers on patterns of energy fluxes in aquatic systems and the ecosystem health of rivers and streams have been particularly widely-cited in international journals. He has pursued interdisciplinary collaborations between ecologists, geomorphologists, geneticists and microbiologists which have led to new ways in which we view aquatic ecosystems. He has often worked in under researched and challenging physical environments such as arid zones and has been successful in raising the profile of these systems among researchers and managers.

He has also made significant contributions to the management and conservation of Australia's rivers and wetlands. His research on riparian zones, food webs and environmental flows has not only had a major impact on the research community but has been widely applied by managers. He has also worked closely with community groups, government agencies and the media to challenge current management practice and water use policies and to promote more sustainable approaches

As demonstrated by his numerous invited lectures and public talks, he is an excellent communicator of limnological issues and concepts and can do this across a range of audiences including students, other researchers, land and water manager, politicians and the general public. His vision and leadership skills have seen him build a leading river research centre at Griffith University and play a critical role in establishing and managing some of Australia's biggest water-related research and management programs.

In addition to his personal achievements, Stuart is a dynamic and enthusiastic researcher, who has inspired and mentored numerous postgraduate students and younger colleagues at his own institution and elsewhere.

For all of these reasons Stuart Bunn is a worthy recipient of the ASL Medal.

ASL EARLY CAREER EXCELLENCE AWARD
Dr Chris Walsh

First, we record that this years committee was composed of a past winner of the award (Dr Fran Sheldon), a past ASL President (Dr Leon Barmuta) and was chaired by another past recipient (Dr Belinda Robson).

The ASL Early Career Excellence Award Subcommittee was unanimous in agreeing that this year's winner's early career exemplifies professional limnological excellence with substantial and tangible contributions to published research, the management of urban streams, peer recognition and excellence in communication in limnology.

Dr Walsh's PhD on the ecology of the shrimp *Paratya* was completed at Deakin University in 1994, supervised by A/Prof Brad Mitchell. Chris then moved to Monash University and the CRCFE and began an exceptional career in urban stream research that has led to more than a dozen papers in leading freshwater journals, several of which are the most cited articles in this field. His work has raised the profile of this important area of freshwater research. For example, in 2003 he organized an international symposium on urbanization and stream ecology, subsequently published in JNABS, that brought together international experts in this field. Although at an early stage in his career, Chris Walsh is viewed internationally as a leader in the field of urban stream research and has almost single-handedly built a research group in this field. His research is recognized for its high quality and diversity and he has also made valuable contributions to quantitative methodology in freshwater science.

In addition to scientific publications, Dr Walsh has made a significant contribution to the 'on ground' management of urban rivers and streams through his interactions with industry partners such as Melbourne Water. His research team, now at the University of Melbourne, is currently examining practical methods to effectively mitigate the impacts of stormwater runoff and novel ways to introduce water-saving strategies to local government authorities and the broader community. He has been invited to speak at various forums revolving around water policy formation at a state and federal level including keynote addresses at international conferences.

Lastly, Chris is known as an enthusiastic and effective mentor of his Honours and postgraduate students. He provides high quality training and encourages his students to write and to publish, to communicate with the scientific community and general community alike, to make a difference with their research findings.

Based on these achievements in research, river management and communication in limnology, the Subcommittee recommends that this year's ASL Early Career Excellence Award is awarded to Dr Chris Walsh. Chris is invited to give a paper at next year's conference and to join the Award subcommittee for next year.

Submitted by Belinda Robson on behalf of the Panel (October, 2007)

MINUTES ASL EXECUTIVE TELECONFERENCE
30th November

Present: S. Bunn, R. Marchant, M. Hart , S. Schreiber, A. Brooks, S. Balcombe, B. Zampatti, D. Baldwin

Apologies: M. Read, M. Douglas

1. **AGM in NZ**: agenda and other reports are ready for the AGM. S.Bunn and R.Marchant will sign any cheques that are needed and RM has been sent membership forms if any members want to pay subscriptions at the meeting.

2. **ASL membership**: M.Hart reported that membership is currently 469 and appears to be slowly declining. Most membership renewals are done via the ASL website and it is not obvious from this system when members are paying their subscriptions. Email reminders can be sent but probably hard copy reminders are the best solution. MH thinks the decline is mostly taking place among older members who are not renewing. S.Bunn suggested that if he could get a list of such members he could write to them encouraging them to renew. MH also suggested that state representatives on the executive could email or write to non-members who get mentioned in the ASL newsletter and encourage them to join. It was also suggested that if a list of members who are university staff was produced then ASL promotional flyers and posters could be sent to them and passed on to potential student members.

3. **Emeritus members**: this category of membership was endorsed by the AGM in 2005 but so far no action has occurred. M.Hart suggested life membership could be given to all members who had maintained active membership of ASL for 40 years or more. About 6 members would currently qualify for this category of membership. The membership officer will write to these members with a certificate commemorating their membership and their emeritus status.

4. **Wetland prize**: R.Marchant suggested that this prize that had been given to students in recent years had too narrow a focus and excluded many students from eligibility. This lead to a larger discussion of student prizes and the feeling that the number of prizes was continually expanding to the detriment of existing prizes. It was decided that a discussion of these issues should be held at the forthcoming AGM. It was also generally agreed that prize categories should be defined more closely and that long term sponsors should be sought for these.

5. **ASL website**: the website is still difficult to use and does not do all that the ASL requires. M.Hart strongly suggested that the site needs to work well before any refinements are contemplated. The Regional Institute (TRI) have discussed refining the site with S.Bunn but no written proposal has been received from them. S.Bunn will get a written costing of suggested refinements before any further expenditure is considered.

6. **Finances:** M.Hart indicated that the society was in a sound financial position but that membership subscriptions seemed to be slowly declining as noted above. She noted that a further $6000 had been received in subscriptions since June 30.

7. **Conferences:** a dedicated person from the organising committee was essential for uploading conference details to the ASL website. This will be brought to the attention of future conference organisers.

MEMBER'S MUSINGS
Margaret Hart

Cheers from Me.

My first introduction to ASL was at a conference at Kinchega National Park near the Minindee Lakes in NSW. Barry at that time was Secretary of the Association and I thought it would "nice" to see some of the country. It was a conference I will never forget. The conference was held in a shearing shed, the sleeping quarters in the park were small, even smaller when one had to share with one other girl and five guys - one who snored all night. I can remember the food was good and the beer truck was never very far away. But, I vowed I would never attend another conference. I guess I did not keep my word.

A few years later I was elected as Secretary/Treasurer and was handed a box of green membership cards. Sometime later the Treasurer and Secretary positions were split and I became the Membership Officer-Treasurer. The rest is history.

ASL has a new Membership Officer-Treasurer. I congratulate Sabine on her election. She will be great in the position and will take ASL to an even higher level.

I would like to say thanks to the many wonderful people I have worked with over the last 26 years. Member who have organized the conferences and the support they have had from their own organizations, the Sponsors (where would we be without them), the Newsletter Editors, Secretary Richard Marchant (I will miss our discussions) our present President Stuart Bunn, all past Presidents and of course you the members of the society, so many I have met and so many I have know for years.

A very sincere thanks to my children (now all grown up, married and with their own children) who in the early days grizzled and gowned about having to lick and stick the hundreds of newsletter and account envelopes. A very big thank you to the Water Studies Centre at Monash University, especially in my early years, when my computing skills were not so good (they have improved a little) and the support with printing etc.

And not forgetting the man in my life, my husband Barry, who has always been there for me.

I wish all members of ASL and their families a wonderful and happy Christmas. May 2008 be a great one for everyone.

Cheers

Margaret Hart

CONFERENCE REPORTS

water: aninconvenienttruth

A southern hemisphere WARNING

JOINT MEETING OF THE NEW ZEALAND FRESHWATER SCIENCES SOCIETY AND THE AUSTRALIAN SOCIETY FOR LIMNOLOGY

Queenstown, New Zealand
3rd to 7th December 2007
Incorporating the 40th Anniversary of the NZFSS (LIMSOC)

I must say that this is one of the very best meetings that I have attended. From the setting and weather (stunning), to the social events (friendly and convivial) to the science (thought provoking and of a high quality), this was the sort of event that reminds me why I bother flying around the place when I really don't have time to present research that I put together in the last days before I left.

The opening session featured presentations from **Morgan Williams** (former New Zealand parliamentary commissioner for the environment), Professor **Peter Cullen** (Land and Water Australia) and **Bruce Wallace** (emminent American stream ecologist). The coverage of topics which ranged from how to engage policy and science through to some generally stunning examples from the US of just how policy can permit massive environmental damage were both sobering and thought provoking. What I took away was a call to work together to deal with our problems and to stay relevant. Genuine problems were identified with trying to communicate between scientists and policy makers, problems that are likely to become even more important as our current generation of well-engaged researchers move into retirement.

The science was as usual of a high standard. I was particularly impressed as a judge of student talks to see how many talks began with a broad context and ended with a 'why you should care' section. This effort spoke directly to the call from the plenary session to make our science more relevant by placing it in context and making applications clear. Congratulations to **Sarina Loo** (Monash University), who took away the ASL prize for top speaker and **Katrina Lansdown** (Monash University) who got the SEQWater research prize. **Amber Clarke** (Monash University) and **Catherine Leigh** (Griffith University) who received honourable mentions for their presentations of their PhD research. Congratulations also go to **Belinda Young** (Honours prize), **Scott Hardie** (Poster prize) and **Sue Powell** (MFR poster prize). **Darren Ryder** stripped me of my Apple Prize (curse him) – for which he deserves hearty congratulations for showing the academics that we need to keep our standards up too.

On the social side, the conference dinner, held at the Skyline restaurant above the town was a blast. The theme of 'Extreme dinner' was well illustrated by a bunch of Kiwis and Aussies dressed up as everything from a shark eating a surfer to three breasts. Yes

breasts. They had blue feet and claimed to be 'blue footed boobies' but they sure looked like breasts to me.

Congratulations to the conference committee, led by **Chris Arbuckle** from Environment Southland for their hard work which made for a great week.

Ross Thompson

REPORTS FROM THE TRENCHES

UNIVERSITY OF NEW ENGLAND

We are all acclimatising back into the wetness of the Tablelands after the burst of sunshine in Queenstown. With teaching finished for the year the summer is packed full of field trips east and west of the divide. **Tobias Bickel** has been thrown into the harsh summer climate west of Moree to start his postdoctoral research with **Glenn Wilson** and **Darren Ryder**, contributing macroinvertebrate, fish and food web expertise to the projects in the Northern Murray Darling Basin. Glenn, Darren and PhD student **Peter Berney** are also up to their knees examining the response of water quality, vegetation and bugs to an environmental flow release to the Gwydir marshes, while PhD student **Debbie Burgis** uses the environmental flow to test an eco-hydraulic model for optimising release patterns in the Gwydir. Darren currently has a scholarship for a PhD project on remote sensing of riparian and instream function in the northern MDB, so send in those applications before the end of January.

Aquifer ecological research continues at UNE, with **Peter Hancock** and PhD student **Moya Tomlinson** contributing further to the world's biodiversity by finding many new species of groundwater bugs. Moya has also finalised an ecosystem services experiments to assess the effects of biofilm grazing by groundwater invertebrates on water quality.

Emilie Warner and **Rob Veal** are at the pointy ends of their projects and have developed a monitoring program to assess the downstream impacts of extraction on the Nymboida River ahead of the Shannon Creek Dam coming on line in 2009. The Hunter River Restoration project is also drawing to a close with **Ben Wolfenden** and Sarah **Mika** nearing the end of their theses on the impacts of instream and riparian restoration on organic matter cycling and biogeochemical cycles respectively. Still in the Hunter River, **Sally Maxwell** and **Rob Rolls** have finished field sampling of their controversial environmental flow release, and have a summer of sample processing and interpreting stable isotope plots ahead of them.

And finally, **Darren Ryder, Andrew Boulton** and **Sarah Mika** have begun a new project through the NSW Environmental Trust to assess the ecological success of stream restoration in rural towns, where the impacts of rural and urban inputs create a unique set of issues for restoration.

Darren Ryder

SCIENCE DIVISION, DEPARTMENT OF ENVIRONMENT AND CONSERVATION, WESTERN AUSTRALIA.

Members of the (mostly new) DEC wetlands research group have largely been in the field this spring for their various projects and now settling in for the summer lab season. **Susan Jones** has joined the group to lead the Avon catchment mapping and evaluation project ("Avon Baselining") following **Lien Sim's** departure in June. She and Adrian undertook a road trip to select sites and **Anna Leung** and **Dani Halliday** were not far behind sampling invertebrates, water chemistry and waterbirds. These data will be used to validate and iterate models of wetland biodiversity richness produced using spatial datasets and biodiversity data from Wheatbelt biodiversity survey and monitoring projects.

Anna and Dani are also assisting **John Lizamore** to produce a digital map of Wheatbelt's 20000 basin wetlands. John's project is running in parallel to the Avon Baselining project, but with different funding, and aims to map and evaluate conservation significance of Wheatbelt wetlands outside of the Avon, with an emphasis on identifying wetlands of lowest value to receive agricultural drainage water.

Dave Cale and **Melita Pennifold** are continuing their Wheatbelt wetland biodiversity monitoring project (including an intensive survey of wetlands within the Lake Bryde Natural Diversity Recovery Catchment) and Dave was out in August and October to undertake the next round of sampling. Melita has also just finished reporting on Avon River pool invertebrate faunas as a contribution to determining their conservation significance in relation to Threatened Ecological Community assessment.

An intensive survey of wetland biodiversity within the Hutt Lagoon/Hutt River catchments (north of Geraldton) is also underway. This project aims to assess and prioritise the conservation significance of the catchments' wetlands as part of an assessment of the suitability for the catchments to be the next Natural Diversity Recovery Catchment under the State Salinity Strategy. The river is fresher in summer than in spring as source water becomes restricted to lowland freshwater springs rather than the salinised upland catchment. **Dave Cale** and **Kirsty Quinlan** will survey the fauna while **Greg Keighery** will survey wetland flora.

Karen Sutcliffe has (re)joined our group for a short time to run the Forest Stream Monitoring project which aims to address a key performance indicator of the State's Forest Management Plan dealing with aquatic biodiversity conservation. Kirsty and other staff recently completed the third year of sampling invertebrates at 50 Jarrah and Karri Forest sites that were selected to represent a range of land management practices.

Finally, **Adrian Pinder** has consolidated the Pilbara Biodiversity Survey wetlands dataset of more than 1100 species x 98 sites x 2 seasons and will begin to tease out the patterns in this over the coming months (he says with fingers crossed behind his back!).

Adrian Pinder

MONASH FRESHWATER ECOLOGY RESEARCH LABORATORY, SCHOOL OF BIOLOGICAL SCIENCES

The freshwater ecology group at Monash looks forward to an exciting year

The highlight for mFERG has been the success of our students at the ASL conference in Queenstown, with **Dr Sarina Loo** (now working in policy at the Victorian Department of Sustainability and Environment) getting top prize for her talk on invasion dynamics of *Glyceria*, while **Amber Clarke** was highly commended for her talk on the initial results of her headwater streams work. Amber has recently completed another season in the field (much of which was a desperate search for any water at all) and is 'looking forward to' (not her words) some time in the lab id'ing the bugs. Other lab dwellers this summer will be **Beth Wallis** (completing the processing of the samples from her stream confluence work), **Karen Cooper** (working on her ISC study) and **Elise King** (community dynamics of intermittent ponds). Out in the field **John Morringiello** has started in earnest starting to sample fish for his work on life history traits and interactions with hydrology, and is joined by Honours student **Huon Clark. Susie Ho** has located her study sites on the Ovens floodplain where she will investigate food web consequences of *Gambusia*. **Sam Imberger,** having got her wedding out of the way, is locating study sites to begin her work on carbon dynamics in urban streams. **Mardiana Ali** is looking forward to getting out in the field in January to begin her work on the nutrient dynamic and food web implications of *Typha* in lowland streams. **Alissa Monk** (marine ecotoxiology), **James Douglas** (trout-galaxiid interactions) and **Fiona Melvin** (climate change biology) are continuing on their Honours work, aiming for completion in March. We have also recently said goodbye to **Iraima Verkaik** from Spain, who has spent an intense period of work on the effects of fire on streams in Victoria, to complement her ongoing PhD work in Spain. Iraima was an example to us all of just how hard you can work with a deadline!!

Nick Bond has returned from his trip to China, where he worked on a environmental flows project and is deeply immersed in the planning for his eWater project. **Paul Reich,** ably assisted by **Matt Johnson** and **Thomas Daniel** is continuing to collect data on the large scale riparian restoration project funded by MDBC – with the first of the data really starting to flow now. **Damien McMaster** together with Paul, Sam and Nick continue to work on the Broken-Boosey system. The wetland plant dynamics work is entering the data gathering phase, ably led by **Kay Morris,** with **Elisa Raulings** away on maternity leave. **Tricia Wevill** has recently joined the team to cover for Elisa while she is away.

Recent completions and conferrals include **Dr. Sarina Loo** and **Dr. David Reid** and Honours students **Will Sowersby** (habitat preferences and the effects of trout on riffle galaxiids), and **Sara Jacobs** (interactions between social perceptions and biological realities of urban stream health).

On a celebratory note we congratulate **Sam Imberger** on her recent wedding, and **Elisa Raulings** on the birth of her daughter.

Ross Thompson

INTEGRATED CATCHMENT ASSESSMENT AND MANAG EMENT CENTRE (ICAM), THE FENNER SCHOOL OF ENVIRONMENT AND SOCIETY, THE AUSTRALIAN NATIONAL UNIVERSITY.

iCAM has several exciting projects underway and just starting. Many of our projects are focused on developing models to assist environmental managers in prioritising activities, such as strategic investments, planning and on-ground activities. Models are built to be adaptive, fitting into and enabling adaptive management cycles, as well being transferble across systems. Models also aim to portray and quantify uncertainties, such as natural variability and lack of knowledge.

Models are built to acknowledge that often our best knowledge of how to manage ecosystems is made up of a mix of information ranging from 'gut feel' to quantitative process-based models. In natural resource management (NRM) we need flexible integration techniques that can structure the collection of these qualitative and quantitative forms of knowledge.

In our experience, Bayesian networks have been ideal for assembling knowledge to explore system interactions (investments -> activities -> processes/impacts -> outcomes), while capturing the uncertainties in this knowledge. They are also an accessible and intuitive modelling approach that allows both researchers and decision-makers to document knowledge and interrogate system interactions within an adaptive framework.

Two of our current projects are described below:

Landscape Logic
In Landscape Logic we have 2 streams: (1) building capacity within NRM bodies to develop Bayesian networks to structure problems, build on Program Logic and Matters for Target processes, and assist with monitoring, evaluation and reporting requirements; and (2) the development of Bayesian networks for linking investments to outcomes. We currently have case studies in Victoria and Tasmania. The project will finish in 2010.

Working on this project are **Jenifer Ticehurst, Lachlan Newham, Wendy Merritt, John Norton** and **Carmel Pollino.** Student projects are being done by Serena Chen and **Marit Kragt**. The project is led by **Tony Jakeman.**
Climate Change in the NSW Central West
Climate change is now being acknowledged in environmental planning strategies in Australia. However, there are still difficulties in linking strategic level responses to climate change with local impacts. To date, only limited research has been conducted in predicting the effects climate

change on natural resource condition at regional and local levels. To assist the the Central West Catchment Management Authority (CMA) in NSW with understanding and predicting impacts of climate change, we have developed a Decision Support System (DSS). Sitting within the DSS are biophysical, socio-economic and indigenous system views of climate change. The DSS is flexible, and can be adapted to other catchments as well as updated as new knowledge is gained.

Working on this project is **Matt Tighe, Ambrose Andrews** and **Carmel Pollino**. The project is lead by **Susan Cuddy**. We just finished this project.

Projects starting in 2008

Next year looks to be another busy one. We have two new projects starting with the NSW Dept. of Environment and Climate Change projects. Commencing in January, we will be designing a prototype DSS for the Narran Lakes, working with **Martin Thoms** and his group at the University of Canberra. In March, we will designing a prototype DSS for the Gwydir wetland, working with Glen Wilson at the University of New England. Both DSSs will be used to assist in the management of environmental flow allocations to the wetland systems.

Working on these projects are **Sue Powell, Peter Manger** and **Carmel Pollino.**

"NOW THIS SONG TELLS OF A LOVELY MOUNTAIN STREAM FLOWING THROUGH THE MISTS OF MORNING — BUBBLING, SWIRLING, CARRYING INDUSTRIAL WASTES..."

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